



**HIGH DESERT**  
e d u c a t i o n

evaluation | research | technical assistance

Northern New Mexico Council for  
Excellence in Education

Exemplary Practices Initiative  
(Goal 2)

August 2000

High Desert Education  
3900 Juan Tabo NE  
Albuquerque, NM 87111

505-275-6403  
(FAX) 505-298-3939

[romero@highdeserteducation.org](mailto:romero@highdeserteducation.org)

# Northern New Mexico Council for Excellence in Education Exemplary Practices Initiative (Goal 2)

## Table of Contents

Executive Summary.....	1
Exemplary Programs	
Community Academy of Science and Math .....	3
Drawing from the Well.....	5
Family School Partnership .....	7
Millennium Camp .....	9
Service Learning.....	11
Summer Environmental Science Program.....	13
Summer Youth College.....	15
Summary .....	17
What Next? .....	18

High Desert Education  
Ann Del Vecchio, Ph.D.  
Carlos Romero  
Bruce Thompson  
Sharon Yates

# Executive Summary

Goal Two of the Northern New Mexico Council for Excellence in Education (NNMCEE) calls for the identification of educational initiatives for funding or advocacy. Under this goal, an “Exemplary Practices Initiative” has been established to

- conduct a broad scan of the educational environment;
- identify programs that are aligned with the mission, priorities, and purpose of NNMCEE; and
- present the findings of exemplary programs to the council.

## Process

A three-phase process was designed that included:

- a telephone survey of all 20 school districts in the NNMCEE service area;
- contacting Institutions of Higher Education in the region;
- reviewing existing data sources such as the CRCM database, LANL programs, LANL Foundation grants, and McCune Foundation programs; and
- establishing an online nomination process where all stakeholders – including NNMCEE members - could submit information on programs in the region.

## Criteria

The initial scan placed emphasis on programs that:

- are aligned with the mission, purpose, and priorities of the NNMCEE;
- provide direct service to students;
- are significant in terms of service provided (dosage, duration, longevity);
- address state and national priorities for reading and literacy, math and science, technology, school-to-work;
- serve students who are at risk for educational failure;
- are linked to school improvement plans;
- are integrated with the curriculum;
- have clearly articulated program design with measurable goals and objectives;
- have data to support success; and
- would benefit from NNMCEE support.

Because strong consideration was given to the degree to which NNMCEE support would be beneficial, many outstanding programs were not considered beyond the first screening. It should be noted that the initial screening was based on information submitted from the field and the perceptions of the researcher. It

was also based on the ability of agencies to provide information for review – many potentially exemplary programs did not respond.

A more objective set of criteria was established for those projects selected for further consideration. However, ultimately, the findings represent the judgments of the researchers.

Overall ratings were based on the following:

1. addresses important educational issue(s)
2. aligned with NNMCEE mission and priorities (including purpose of Goal 2)
3. articulates its goals and design clearly
4. develops complex learning and thinking skills
5. target audience includes at-risk or underserved students
6. promotes coherent organizational change
7. rigorous, measurable evidence for outcomes
8. adaptable for use in multiple contexts

This report summarizes the following projects:

- Community Academy of Science and Math
- Drawing from the Well
- Family School Partnership
- Mesa Vista
- Millennium Camp
- Service Learning
- Summer Youth College

Within the parameters of the NNMCEE mission, these projects represent a wide variety of programs. Some are school-based while others are initiated through community colleges or other agencies. Some run during the school year and others are implemented during the summer time. There is, however, a common thread: they all work to provide engaged, hands-on, real world learning experiences. This type of integrated, thematic instruction is based on the latest brain research (Randle, 1997; Kovalik, 1998).

## Next Steps

It may take several years to refine the process. At least two issues must be addressed if this initiative is to improve. First, the data collection process must be strengthened. A wider window of time is needed to ensure that all stakeholders are contacted and have the opportunity to submit information. Data collection should use multiple sources and methods. If possible, it should be ongoing. As incentive, the benefits of being identified as an exemplary program must be clear. Data collection is a shared responsibility and, thus, must have shared value. Stakeholders must see the value of the process – even if they are not selected

as an exemplary program. Many worthwhile programs were not included in the process because personnel at the school, program, or agency were not able to respond.

Second, the selection criteria must be clarified. NNMCEE members must decide more precisely what variables should be considered and what weight to assign each variable. The gap analysis under Goal 1 must inform the criteria. Many projects may show promise, but are lacking formally articulated goals, objectives, evaluation, and integration components. Rather than be eliminated from consideration based on such factors, perhaps they could be offered technical assistance in these areas.

## Added Value

The value of this research could extend well beyond the identification of exemplary programs if it involves the development and maintenance of a dynamic, interactive, and widely accessible database. This may be accomplished via a web-based database. The database could be linked to technical assistance on developing goals, objectives, action plans, evaluation plans, budget, etc. It could be user-driven, where stakeholders create their own profiles. Such a database could be searchable by any variable. The impact would be significant. All programs could be strengthened by improved access to technical assistance, coordination and leveraging of resources, and shared knowledge on best practices.

### NNMCEE Mission, Purpose, and Priorities

**Mission:** The Northern New Mexico Council for Excellence in Education (NNMCEE) was formed in 1997 to advocate for education and workforce development in northern New Mexico.

**Purpose:** With leadership from the Los Alamos National Laboratory and the NM State Department of Education, the council includes representations from school districts and two- and four-year institutions of higher education. The purpose of the NNMCEE is to identify common needs, goals, and strategies, and to leverage resources to better serve the region. The underlying mission is to foster greater educational competitiveness and promote employability in northern New Mexico.

**Priorities:** The NNMCEE is guided by the following priority areas:

- School-to-work (job placement, career planning)
- Staff and faculty development (emphasizing math and science, environmental education)
- Use of Distance Education and other technologies
- Field-based internships
- Research Collaborations (including shared best practices)
- Partnerships with schools and the Los Alamos National Laboratory

### NNMCEE Goal 2

*By August 2000, recommend 4-5 educational initiatives for funding by the Los Alamos Foundation, the New Mexico Legislature, or other funding agencies.*

### NNMCEE Districts

Bernalillo  
Chama Valley  
Cuba  
Dulce  
Espanola  
Jemez Mountain  
Jemez Valley  
Las Vegas City  
Los Alamos  
Mesa Vista  
Mora  
Pecos  
Penasco  
Pojoaque  
Questa  
Rio Rancho  
Santa Fe  
Taos  
Wagon Mound  
West Las Vegas

# Community Academy of Science and Math (CASM) – Mora Independent Schools

## Overview

CASM is a community/parental team effort to support K-5 students with math and science place-based learning opportunities. Place-based learning assumes that the best learning takes place when students experience learning in their own environment, firsthand, gaining insight and making connections on a personal level. It can be incorporated into a wide variety of teaching environments-combining literature, science, math, history, and the arts to yield a holistic, enlivened curriculum in the context of the students' own community.

Students are invited to participate in CASM through a series of letters sent to the home. The letters make it clear that parents must be willing to attend CASM events with their child. This parent participation provides modeling for the children, minimizes school liability, and encourages the parent to be an active participant in their child's education.

This year's CASM involved 65 students and their parents in a variety of math and science learning activities. Monthly sessions were held where students had the opportunity to learn about electricity, family math and land forms. In addition, summer events were held that allowed the students to participate in place-based environmental learning. In order to teach the children about erosion, and its effects on the community, CASM helped a community member plant willow trees to save his crops. An employee of Soil and Water Conservation explained the effects of erosion and flash flooding to the students. Then, the students learned ways to solve the problem, and to their great delight, had to climb in the river to participate in the

solution. Another summer activity involved visiting the local fish hatchery.

## Infrastructure

Originally funded by the National Science Foundation/New Mexico Highlands University, CASM this year had a \$4,000 budget. The funding was provided by the Rural School and Community Trust (Sangre de Cristo Communities and Schools Consortium). These monies provided the three volunteer teachers with a \$700 stipend. CASM also used the funding to give each child a medal and to provide refreshments for the summer events.

## Student Goals and Outcomes

Student attendance is perhaps the best sign that this is a well-received program. Only one of the 65 students did not return after attending a CASM event.

CASM provides students with an opportunity to supplement and extend their classroom learning with hands-on activities that excite them about math and science. The interdisciplinary nature of this program means that students are not just studying math and science, but also reading, technology and career readiness. For instance, while studying landforms, students had to learn about map reading, including studying elevations. They had a guest speaker who told them about careers in this field. The older students then used clay to create a map that reflected their region of the country.

Parents also seemed to benefit from the learning experiences. They became actively involved in the projects. One man returned to ask the teacher where he could get supplies for himself to build a similar project at home. Although some of the parents were the same ones who are at every school event, others were ones who had not participated at all in their child's education before CASM.









## Future Plans





Additional funding could be used to purchase supplies that had to be borrowed this year. For instance, students made flashlights, but then had to disassemble the flashlights because the materials belonged to the science lab. Many of the students wanted to take them home. Funding would also allow guest presenters to be paid a stipend. CASM would also like to purchase a computer(s) for use in their program. Many students don't have access to the Internet at home. There is a continued funding need to pay a stipend to the teachers who spend many hours putting this program together, to buy refreshments for the program, and to purchase awards for the award banquet.

### CASM at a Glance

<b>Primary Agency</b>	Mora Independent Schools
<b>Budget</b>	\$4,000
<b>Contact</b>	Florence Trujillo 505-387-2125 celesgon@hotmail.com
<b>District(s) Served</b>	Mora Independent Schools
<b>Partners</b>	Rural Schools and Community Trust – Sangre de Cristo Communities and Schools Consortium
<b>Number of Students Served</b>	65
<b>Content Areas</b>	Math, Science, Technology, Service Learning, and Reading
<b>Timeframe</b>	School Year

## OVERALL RATING

<b>addresses important educational issue(s)</b>		Involvement of family, hands-on, place-based learning; however, dosage is minimal.
<b>aligned with NNMCEE mission and priorities (including purpose of Goal 2)</b>		Introduce children to real-world applications of knowledge. Uses field-based experiences. Addresses math and science with some integration of technology.
<b>articulates its goals and design clearly</b>		Flexibility has been a necessity, as sources and amount of funding have changed.
<b>develops complex learning and thinking skills</b>		Students are provided topics and problems that can be adjusted to the developmental levels of the students. Having parental assistance allows the child the individual attention needed to work through a problem, as long as the parent is willing to let the child do the work.
<b>target audience includes at-risk or underserved students</b>		Letters are sent to every student at the Mora elementary schools, so anyone can attend. However, the New Mexico State Department of Education estimates that approximately 43% of children 5-17 in the Mora district are living in poverty, which makes it likely that a large percentage of those who participate in CASM are at-risk and/or underserved.
<b>promotes coherent organizational change</b>		CASM has not been institutionalized, and relies largely on the energies of dedicated, volunteer teachers.
<b>rigorous, measurable evidence for outcomes</b>		Attendance is well documented, but students are not tracked to measure outcomes in academic areas.
<b>adaptable for use in multiple contexts</b>		CASM is easily adapted to any school that has teachers or volunteers willing to provide leadership, and parents/students willing to attend. Administrative support is crucial.

 poor
  below average
  average
  above average
  exemplary

# "Drawing from the Well" – Peñasco Independent Schools

## Overview

Drawing from the Well is a communication arts/local history project that relies upon inter-generational relationships, academic learning and the connection with one's heritage. This program is designed to interface with academic disciplines such as Science, Communication Technologies, Social Studies and Language Arts, as well as improving students' career readiness. Structured into this project is the production of radio documentaries, group art displays and a final oral presentation for parents, educators and invited guests during a Community Celebration.

This program was developed by Judy Goldberg, a media arts specialist and educator who then served as Project Director. "Drawing from the Well" has been in existence for two years. During the second year, a group of 15 students spent 11 weeks meeting 1-2 times a week studying one of four topics based on student interest. The topics this year included Remedios (the traditional use of herbs), Tools and Technology (mills and farm implements), the Arts (wood-working, carving and furniture making), and Acequias and the land. Students took field trips to the Governors Museum in Santa Fe to learn about local history and then visited and interviewed at least two ancianos/elders of the community to gain a sense of the oral history of the community. The Community Celebration was a time when the students synthesized what they have learned and share it with their community.

## Infrastructure

"Drawing from the Well" took place in two teachers' classes, but most of the coordination was done by the Project Director, Judy Goldberg, who was paid a salary.

"Drawing from the Well" was funded in the following ways:

1. A \$15,000 grant from the Museum of New Mexico's Office of Statewide Program and Education, plus in-kind services including visits, staff expertise, and equipment from the Van of Enchantment, consultation meetings, office support, mailings, etc. An additional \$500 came from the Museum of New Mexico Foundation to support food, entertainment, and documentation of the Community Celebration;
2. In-kind contributions, guest speakers and the position of community liaison was supported by the Peñasco Jr./Sr. High School's Bilingual Department;
3. A \$500 mini-grant for equipment purchases and supplies for the Community Celebration came from the Taos Regional Service Learning Center;
4. The Palace of the Governors and the Museum of International Folk Art contributed docents' and curators' time and travel.
5. \$100 for transportation to the Santa Fe Museums was donated by La Jicarita Enterprise Community, School-to-Work Program.

## Student Goals and Outcomes

Participating in "Drawing from the Well" impacts students in a variety of ways. Students have a context to develop research skills, as well as reading, writing and critical thinking. They also become responsible for their own learning. Another benefit is learning the work-related skills that many employers say are missing in too many of today's youth, such as how to deal with the challenges of working within a group and coming to consensus. Students also learn how to listen and learn from the community elders and find out how these elders' life experiences fit into the history of the region. In addition, they gain valuable technology skills, including audio recording, audio mixing and editing, computer software, Internet and email, and digital photography. These skills are then used to produce a meaningful, final product. All of this is done in a context that is fun for the students, and

### "Drawing from the Well" at a Glance

<b>Primary Agency</b>	Peñasco Independent Schools
<b>Budget</b>	\$16,000 from various sources, plus in-kind contributions
<b>Contact</b>	Judy Goldberg 505-986-1880 viewpoint@trail.com
<b>District(s) Served</b>	Peñasco Independent Schools
<b>Number of Students Served</b>	15
<b>Content Areas</b>	Arts, Reading, Math, Science (environmental science), Social Studies, Technology, School-to-Work.

simultaneously satisfies the New Mexico State Department of Education's Content Standards with Benchmarks.

Other parties benefit as well. The community elders gain the satisfaction of connecting with today's youth and of having their own life experiences valued. The community has a record of local history. The museums have an opportunity of reaching out to New Mexico's rural communities.

## Future Plans

Currently, the Chief Educator of the Museum of New Mexico is seeking long-term funding for this program to continue in other areas around the state. In addition to what is currently being funded, "Drawing from the Well" would like to develop booklets, photographic display, video projects, internet dissemination and theatrical presentations. They would also like to produce a curriculum guide. Additional funding would also allow them to acquire additional equipment supplies and technical support for the project to expand in other communities throughout New Mexico.

## OVERALL RATING

<b>addresses important educational issue(s)</b>		Interdisciplinary nature of the project benefits students. Cross-generational communication and intensive use of community resources are important. Integrated thematic instruction is based on the latest research.
<b>aligned with NNMCEE mission and priorities (including purpose of Goal 2)</b>		Involves field-based experiences including close community collaboration. Addresses important and practical school-to-work issues such as teamwork, use of technology, problem solving, interpersonal skills. Could strengthen math and science components.
<b>articulates its goals and design clearly</b>		Project, including the curriculum, is well defined, well planned and the goals are well documented.
<b>develops complex learning and thinking skills</b>		Students learn extensive problem-solving skills, as well as work-related skills that will benefit each one in the future.
<b>target audience includes at-risk or underserved students</b>		Students are chosen according to the class that they are in. According the NMSDE, 46% of the students in the Peñasco district are living in poverty, making it quite likely that several of these students are at-risk. Impact is minimal, however, given the small number of participants.
<b>promotes coherent organizational change</b>		At this time, only a few 7 <sup>th</sup> graders are being impacted by the program. Peñasco is now considering whether to make "Drawing from the Well" part of their regular 7th grade curriculum. Administrative support is needed. Currently, an outside provider is implementing the program.
<b>rigorous, measurable evidence for outcomes</b>		The outcomes have been well documented. Measurement of outcomes is performance-based using student work products. No research on outcomes has been done to compare this group to students who have not participated, and no external evaluations have taken place.
<b>adaptable for use in multiple contexts</b>		As it currently exists, the cost may be prohibitive to some schools trying to implement the project. An outside director is a considerable expense, however the project could possibly be adjusted to use the skills/talents of current personnel. Although there is no question that the expertise of the current director has been a valuable asset for the project. It would be very easy to adjust the concept to other grades and/or subject matter.

 poor
  below average
  average
  above average
  exemplary



# Family School Partnership – West Las Vegas Schools

## Overview

The West Las Vegas Family Partnership program is beginning its fourth year of existence. The program was recognized by the State Department of Education as a High Performing School. The program was developed by the district in response to the large number of home-schooled children. It originally involved a group of home-school parents with children in grades 1-8. Instruction is based on multidisciplinary, thematic units with plenty of hands-on learning. The classroom environment features low student teacher ratios, high levels of parental involvement, and multiage classrooms. Initially, enrollment was predominately made up of children who needed to supplement their home school curriculum. However, since its inception, the program has expanded to include other students who can benefit from the alternative, individualized setting. These students would not otherwise benefit from an alternative program. Beginning in the 2000-2001 school year, the Family School Partnership will serve students in grades K-12.

## Infrastructure

Students in the Family School Partnership attend classes three days per week. During that time, they focus on core academic subjects of language arts, math, science, social studies, and Spanish. The district provides parents with materials and curriculum for use in the home-school, which takes place two days per week. The program is aligned with state content standards and benchmarks, and students participate in standardized testing. The district has provided the personnel, facilities, and materials to support the program. Family School Partnership students have access to all district resources including transportation and extra-curricular activities.









## Student Goals and Outcomes

As mentioned, Family School Partnership students are held accountable to the same standards as regular students. The nature of the program lends itself to alternative, performance-based assessments. Evaluation of student progress is ongoing involving teachers, parents, and students. Nonetheless, the success of the program is evident in the results of state standardized testing, where Family Partnership earned the highest scores in the CTBS5/Terra Nova in Reading/Language Arts, Math, Science, and Social Studies in 4<sup>th</sup>, 6<sup>th</sup>, and 8<sup>th</sup> grades. In most cases, Family School Partnership students' test scores exceeded statewide averages. These levels of achievement are attributed to the individualized instruction

### Family School Partnership at a Glance

<b>Primary Agency</b>	West Las Vegas Schools
<b>Budget</b>	Operational Funds
<b>Contact</b>	Orlando Espinoza 505-426-2333 oespinm@aol.com
<b>District(s) Served</b>	West Las Vegas Schools
<b>Number of Students Served</b>	90
<b>Content Areas</b>	Language Arts/Reading, Math, Science, Social Studies, Spanish
<b>Timeframe</b>	School Year

### OVERALL RATING

<b>addresses important educational issue(s)</b>		Incorporates the latest research on teaching and learning including interdisciplinary, thematic instruction, multi-age setting, low student-teacher ratios, and meaningful and extensive parental involvement.
<b>aligned with NNMCEE mission and priorities (including purpose of Goal 2)</b>		The program includes real-life, hands-on learning. This model can be the basis for collaboration between other districts.
<b>articulates its goals and design clearly</b>		The program is operated under a waiver from the Collaborative School Improvement Act, which delineates the program design.
<b>develops complex learning and thinking skills</b>		The alternative environment, which includes low student-teacher ratios and integrated thematic instruction, is based on research in teaching and learning.
<b>target audience includes at-risk or underserved students</b>		The program is being expanded to serve at-risk students, but was initially designed for home-schooled students, a population <i>not</i> considered at-risk for educational failure.
<b>promotes coherent organizational change</b>		This program represents significant, systemic, and sustainable change on the part of the district.
<b>rigorous, measurable evidence for outcomes</b>		While the program relies on alternative, performance-based student assessments, the students also participate in statewide, standardized testing. This provides compelling evidence of the success of the program.
<b>adaptable for use in multiple contexts</b>		This program can be a model for other districts. However, it requires support and commitment from administration, the Board of Education, teachers, and parents.

 poor
  below average
  average
  above average
  exemplary

# Millennium Camp – Santa Fe Community College/Santa Fe Public Schools

## Overview

The Millennium Camp was staffed and run each summer from 1994 to 1999 at the Santa Fe Community College. Due to discontinued funding from the Santa Fe Schools to Careers grant program, however, the Millennium Camp was unable to operate in the summer of 2000.

The Millennium Camp serves 7<sup>th</sup> and 8<sup>th</sup> grade students and consists of two 2week sessions during the summer break, typically serving a total of 50 students each year – 25 students per session. During those two weeks, students work 7 hours per day, with a break for lunch each day. Students engage in intensive hands-on learning and teambuilding activities, beginning with a ropes course activity on the first Monday of each week. The students then proceed to work in actual physics, chemistry, and computer labs, learning the fundamentals of these content areas in a small tutorial environment.

Students are recruited from all middle schools in the Santa Fe area, including Pecos, Mesa Vista, and Española. The Millennium Camp is not intended to be advanced study for A students wanting to get a head start, but rather for C and D students who are having a hard time in math and who need a more solid background in math and science before starting high school. These students are typically smart, at-risk children on the verge of becoming disenchanted with math, science, and school in general. Also, they generally come to the Millennium Camp not understanding how math and science may pertain to their future career, or how much fun these subjects can be.

## Infrastructure

The project coordinator, Steve Peralta, is a full-time instructor of math and engineering at the Santa Fe Community College. The project coordinator typically designs the summer curriculum, recruits teachers for each course, and recruits participants from the various middle schools in the Santa Fe area. The project's \$25,000 budget includes stipends for the 5 instructors, fees for use of the ropes course facility, transportation for students each day (in the form of city bus passes), lunch for students each day, and classroom and laboratory materials. Other overhead, such as printing, copying and telephone expenses, is provided by SFCC.

## Course Content

Last summer, the curriculum for the Millennium Camp included physics, chemistry, computer/Internet technologies, and journalism. In the physics lab, students explored the fundamentals of classical Newtonian physics, building catapults for water balloons and studying the various forces involved in

their parabolic trajectories. In the chemistry lab, students studied the properties of various common household products and created simple compounds from them. In the computer lab, students learned the fundamentals of the programming language, BASIC, and designed web pages to publish the experiments they conducted in their other courses. In the journalism course, students explored the fundamentals of reporting and media criticism, and published collaboratively a small newspaper at the end of each session.









## Student Goals and Outcomes






At the beginning of each session, each student was asked to write down what challenges they faced in their math and science classes, and what kinds of skills and tools they wanted to gain from their work at the Millennium Camp. This self-assessment served for each student as a kind of pre-service definition of benchmarks, by which the student would be evaluated at the end of the session. Because students did not receive credit or formal grades for their work at the Millennium Camp, the learning environment was more relaxed and self-paced than a typical school classroom. Students developed a genuine curiosity for and interest in the physical sciences, driven by the founding of a more solid groundwork for future study. At the end of each session, students were again asked to define their level of confidence in their ability to learn math and science, and participants overwhelmingly responded that they were less anxious, more confident, and more eager to return to class in the fall. Also, feedback from students about the course content, materials, and instructors helped to guide changes in the program for the following session.

### Millennium Camp at a Glance

<b>Primary Agency</b>	Santa Fe Community College
<b>Budget</b>	\$25,000 / yr.
<b>Contact</b>	Steve Peralta 505-428-1365 speralta@santa-fe.cc.nm.us
<b>District(s) Served</b>	Santa Fe Public Schools, Pecos Independent Schools, Mesa Vista Consolidated Schools, Española Municipal Schools
<b>Number of Students Served</b>	50 students (7 <sup>th</sup> and 8 <sup>th</sup> grade)
<b>Content Areas</b>	Math, Science, Language Arts
<b>Timeframe</b>	Summer

## OVERALL RATING

<b>addresses important educational issue(s)</b>		Design is thoughtful and well-articulated; content is integrated into the curriculum; incorporates practical, hands-on learning; targets at-risk students.
<b>aligned with NNMCEE mission and priorities (including purpose of Goal 2)</b>		Incorporates science and math; environmental science; field-based research; practical/school-to-work application; involves many schools in multiple districts.
<b>articulates its goals and design clearly</b>		Course curriculum is rigorous with integration into the broader science and math curriculum. However, there are no clear, assessable outcomes given.
<b>develops complex learning and thinking skills</b>		Increases in-depth understanding across multiple disciplines. Involves hands-on field research, combined with seminar-style labs, promotes active inquiry. Includes preparation for entering a technology-infused workplace. Design is highly collaborative, team-oriented learning.
<b>target audience includes at-risk or underserved students</b>		Students are targeted who are challenged in math and science courses. Recruitment in grades just before the critical jump to high school. No explicit at-risk screening or assessment is taken at any time
<b>promotes coherent organizational change</b>		Program reflects a vision of organizational reform: hands-on field work, performance assessment, self-assessment, etc. Teachers from within the public school system are recruited as instructors, and the learning styles involved can be incorporated into other schools' curriculums. However, the program is isolated at the SFCC: no increased involvement by parents, teachers, or staff from other schools
<b>rigorous, measurable evidence for outcomes</b>		Informal self-assessments of student needs combined with a reflective post-service self-assessment. No formal classroom assessments / grades. No pre- or post- studies of student outcomes or analysis of change.
<b>adaptable for use in multiple contexts</b>		Technology requirements are easily available; program is cost-effective relative to benefits; project is easily sustainable, scalable, and replicable; cross disciplinary and adaptable to a range of educational settings; clear, detailed information about the conditions required for successful implementation.

 poor
  below average
  average
  above average
  exemplary

# Service-Learning – Santa Fe Community College

## Overview

Service-Learning is a generic term for a broad range of alternative instructional activities that incorporate community service into the traditional school curriculum. Examples of Service-Learning include designing, building, and maintaining public recreation areas; rejuvenating wildlife areas while learning about the local flora and fauna; and serving as health aides, dance teachers, and emerging literacy tutors at underserved schools. Service-Learning endeavors to expand and enrich students' opportunities to learn math, science, technology, reading, writing, social studies, art, health, career readiness, and life skills. One early manifestation of Service-Learning at the Santa Fe Community College, SOS (Students Offering Service), targeted at-risk youth at Agua Fria Elementary School, Ortiz Middle School, and Santa Fe High School, offering tutoring and mentoring aimed at reducing negative social behaviors such as dropouts, teen pregnancy, substance abuse, and school violence.

The Santa Fe Community College model (in close cooperation with the Santa Fe Public Schools) in fact serves two different tiers of students in the course of any given Service-Learning activity: (1) the group of students in each K-12 school who participate in and learn from the project, and (2) the community college student(s) who themselves design and implement the project. While each group may participate in the same Service-Learning project for classroom or course credit within the framework of their respective curriculums, the goals and outcomes are generally very different for each group.

The second group of students (those who design and implement the Service-Learning project) are typically education students at the Santa Fe Community College who plan to go on to careers in education. Therefore, it should be noted that the outcomes these project leaders experience will also directly influence their future work as educators.

## Infrastructure

The Santa Fe Community College's Service-Learning Program has a total budget of roughly \$175,000 per year, the majority of which comes from Learn and Serve America: Higher Education, an initiative of the Corporation for National Service. The bulk of that grant has been used to pay a living allowance (minimum wage) to twenty AmeriCorps service members in the Santa Fe area.

Housed at the Community College, the Service-Learning Program employs one manager / program director, Gail Terzuola, who is also a part-time faculty member. The office is also staffed year-round by student and community volunteers. A partial list of agencies that operate in cooperation with Service-Learning includes:

- La Familia
- La Residencia
- Boys & Girls Club
- St. Elizabeth Homeless Shelter
- Rape Crisis Center
- Challenge New Mexico
- Santa Fe Family Center

### Service-Learning at a Glance

<b>Primary Agency</b>	Santa Fe Community College
<b>Budget</b>	\$175,000/yr.
<b>Contact</b>	Meredeth Machen 505-428-1334 meredith@santa-fe.cc.nm.us
<b>District(s) Served</b>	Santa Fe Public Schools
<b>Number of Students Served</b>	3,798 elementary school, 527 middle school.
<b>No. of Teachers/Future Teachers Involved</b>	178 SFCC students (as project leaders), 193 SFPS teachers.
<b>Content Areas</b>	Math, Science, Language Arts, Social Studies, Art, Career Readiness
<b>Timeframe</b>	School Year

## Student Goals and Outcomes

Again, for each Service-Learning project that involves Santa Fe Public Schools, two distinct sets of students participate in and gain from the project: (1) the group of students in each K-12 school who engage in the Service-Learning activity, and (2) the community college student(s) who design and implement the project.

### K-12 Students

The project leaders endeavor to align their Service-Learning activities closely with the K-12 students' standard school curriculum. That is, the learning outcomes achieved by the project typically complement and extend the learning that takes place in the classroom and can even be integrated into the class curriculum. For example, students who engage in a wildlife habitat rehabilitation project will not only engage in the hands-on activities of clearing away brush, building erosion barriers, and planting seeds and









bulbs, but they will also study a great deal about the local flora and fauna, the local geology, and the physics of irrigation. With assistance from the students' classroom teacher, these learning activities can become an integral part of the course curriculum, addressing standards across various content areas. Therefore, the goals and outcomes from Service-Learning projects may be reflected in a broad variety of performance-based student assessments.

The project leaders generally focus their attention on students in high-risk schools, as determined by indicators such as poverty factors, grades, and attendance and discipline rates. Very often, students in these high-risk schools face severe barriers to learning that directly affect their performance in school. One unique outcome of Service-Learning is a marked increase in self-esteem as these students contribute their valuable time and effort – working as a team – toward a project that benefits the community in which they live.

### Community College Students

As students at the Santa Fe Community College, the project leaders themselves have very different goals and outcomes than the K-12 students they lead. Project leaders are typically education students who, in the course of implementing their Service-Learning projects, build vital instructional, leadership and planning skills within real-life, hands-on learning environments. They are judged not simply on the basis of the success or failure of their projects, but also on their instructional abilities and leadership skills. The student will start with an initial self-assessment, in which the student takes stock of the perceived strengths and weaknesses of his/her teaching style. At the end of the project, another informal self-assessment, known as the "Reflections Session," accompanies the student's formal grade at the end of the semester. The Reflections Session is a time for Service-Learning project leaders to come together in order to celebrate their growth as teachers, their impact on their students, and their contribution to the community at large.

## OVERALL RATING

<b>addresses important educational issue(s)</b>		Service-Learning incorporates alternative learning methods and is applicable across the entire curriculum. While it does not prescribe any single pedagogy or mode of instruction, it encourages broader and more creative approaches to instruction.
<b>aligned with NNMCEE mission and priorities (including purpose of Goal 2)</b>		Incorporates math, science and technology; addresses school-to work issues; serves students who are at-risk for educational failure; can use NNMCEE support to expand services to more students or to replicate in other settings.
<b>articulates its goals and design clearly</b>		Program design in general is thoughtful and its objectives are well supported by national research. However, individual Service-Learning projects vary in the degree to which goals are articulated and outcomes are documented.
<b>develops complex learning and thinking skills</b>		In the course of their Service-Learning project, most participants engage in higher-order planning and problem solving skills. These skills translate into both better thinking habits and real world problem solving and collaboration skills.
<b>target audience includes at-risk or underserved students</b>		While individual students are not recruited on the basis of personal at-risk factors, Service-Learning does recruit almost exclusively from schools with high at-risk populations.
<b>promotes coherent organizational change</b>		Because it operates as a complement to curriculum delivery, Service-Learning is applicable throughout the school environment. In addition, project leaders who go on to become educators themselves invariably incorporate the ideals of Service-Learning into their classrooms and schools.
<b>rigorous, measurable evidence for outcomes</b>		The completion of each project and its overall benefit to the community are natural benchmarks for measuring outcomes. While there is solid national research that documents the value and outcomes of Service-Learning for primary and secondary students, individual projects at the local level do not evaluate specific student outcomes.
<b>adaptable for use in multiple contexts</b>		Service-Learning is by definition adaptable for use at all grade levels, content areas, and educational settings. Being volunteer-driven, it is extremely cost-effective, and it does not require advanced technological skills or infrastructure. The program is sustainable with limited funding, and it is scalable – it can naturally expand its scope over time to include more teachers, grade levels, sites, etc.

 poor
  below average
  average
  above average
  exemplary

# Summer Environmental Science Program – Mesa Vista Consolidated Schools

## Overview

The Summer Environmental Science Program is a 4-week, intensive high school course offered for credit at Mesa Vista High School. Students work for 7 hours each day, either in class, in the lab, or in the field, depending on the assignment. Field work includes day trips to the Vallecitos River, Rio Grande River, and the Abiquiu Dam area to collect water, plant, and insect samples. These samples are then studied in detail in the lab, with complete comparison studies drawn up at the end of the course. Prerequisites for the course include Algebra I and introductory Biology. This summer, the program served a total of 15 students.

During the school year, the course instructor also offered after-school tutoring to students in algebra and biology. While the after-school tutoring was intended to supplement and extend the summer environmental science course, it was also open to any students who needed assistance in these subjects. Approximately 45 students were served by this component of the project.

## Infrastructure

The project is administered at the district level by Mesa Vista's technology coordinator, Bruce Peterson. Because of the uncomplicated nature of the project's management structure, it could easily be replicated at other schools, or expanded to include other districts.

## Student Goals and Outcomes









The Environmental Science course is offered for credit during the summer, and it is subject to the same assessment and evaluation strategies as other regular science courses offered during the school year. Because of the extensive field work and hands-on learning involved, various higher order performance assessments are integrated into the traditional framework of class assessment. Furthermore, the value of students' own insights and inquiry as they collaboratively explore the scientific method cannot be overstated.






Other outcomes include instilling in students an interest in understanding and preserving New Mexico's diverse ecosystems. Students report that the knowledge they gained through the summer Environmental Science program has made them feel closer to their local habitats and communities.

### Summer Environmental Science at a Glance

<b>Primary Agency</b>	Mesa Vista Consolidated Schools
<b>Budget</b>	\$130,000 / 3 yr. grant (21 <sup>st</sup> Century Community Learning Center)
<b>Contact</b>	Victor Jaramillo 505-581-4504
<b>District Served</b>	Mesa Vista Consolidated Schools
<b>Number of Students Served</b>	15 students per summer; 45 students during the school year
<b>Content Areas</b>	Math (Algebra I), Biology, Ecology
<b>Timeframe</b>	Summer/School Year

### OVERALL RATING

<b>addresses important educational issue(s)</b>	 Incorporates 'place-based' education principles integrated with mathematics and science. However, program design is not supported by research, does not include professional development, and does not address student risk factors.
<b>aligned with NNMCEE mission and priorities (including purpose of Goal 2)</b>	 Integrates math and science with environmental science, field-based research, practical school-to-work applications. Does not include partnerships with other schools or agencies.
<b>articulates its goals and design clearly</b>	 Involves rigorous course curriculum and assessment, with integration into the broader science and math curriculum. However, it is highly dependent on a single teacher. There are no formal mechanisms to measure long-term outcomes or ensure accountability.
<b>develops complex learning and thinking skills</b>	 The project increases in-depth understanding across multiple disciplines through hands-on field research, combined with seminar-style labs to promote active inquiry. It emphasizes preparation for entering a technology-infused workplace.
<b>target audience includes at-risk or underserved students</b>	 Mesa Vista is by definition an underserved region. Students who are having a hard time in school are provided supplemental tutoring. However, there is no explicit, active recruitment of at-risk kids.
<b>promotes coherent organizational change</b>	 While it does reflect a vision of organizational reform via place-based learning and hands-on field work, it is only moderately sustainable, scalable or replicable in this or other districts.
<b>rigorous, measurable evidence for outcomes</b>	 The project includes formal classroom assessments/grades, however it is lacking in pre- or post- studies of student outcomes or analysis of change.
<b>adaptable for use in multiple contexts</b>	 The technology requirements are easily available; the program is cost-effective relative to benefits; it is cross-disciplinary and adaptable to a range of educational settings. However, there are no clear, detailed guidelines given about the conditions required for successful implementation.

 poor  
  below average  
  average  
  above average  
  exemplary



# Summer Youth College – Luna Vocational Technical Institute

## Overview

It is never too early to start college. This motto is the driving force behind the Summer Youth College. With leadership from Luna Vocational Technical Institute (LVTI) and La Jicarita Enterprise Community, the program completed its first year, serving over 175 students from nine northern New Mexico school districts. The Youth College is designed for students entering 6<sup>th</sup>-10<sup>th</sup> grades. The program runs for six weeks, with students attending courses Tuesday through Thursday while experiencing a residential college setting.

A wide range of courses was offered the first year, including:

- Basic Math
- Applied Math
- Field Science
- Food Science
- Land/Water Culture
- Community Research
- NM Creative Literature
- Introduction to the Internet
- Web Design
- Desktop Publishing

In addition, arts and recreational courses and activities were provided. The program design was carefully balanced to give participants a true taste of college life, while at the same time appealing to their interests and skill levels.

## Infrastructure

The Summer Youth College is supported, in part, through a U.S. Department of Education Gear-Up grant (La Jicarita Enterprise Community) and a \$15,000 grant from the Commission on Higher Education. In addition, participants pay a nominal tuition - \$20 registration plus \$20 per course. This includes transportation. Instructors are from Las Vegas City, Mora, and West Las Vegas school districts as well as staff from LVTI and New Mexico Highlands University. LVTI has committed the facilities and key personnel for Summer College courses, while NMHU is providing dorms for student use. Volunteers from the community are used to provide supervision of students during their residential experience.

## Student Goals and Outcomes

The goal is to expose students to a college atmosphere in order to make students and their families more comfortable with the idea of going to college, initiate early education planning, and

strengthen skills in core academic subjects. While data is collected on participation and satisfaction, no outcome data is collected during the summer experience. However, the Summer Youth College is planning to use performance indicators from the La Jicarita Enterprise Community Gear Up grant to track progress of participants during the school year. Specifically, they will use the following process and outcome measures:

- enrollment in college preparation courses such as pre-algebra, algebra, geometry, trigonometry, physics, biology, chemistry – including Advanced Placement courses;
- grades in college preparation courses;
- participation in college entrance exams such as the PSAT, PLAN, ACT, SAT;
- scores in college entrance exams; and
- participation in individual and family educational planning and counseling activities.









## Future Plans


The 2000 Summer Camp did not materialize until late spring. Thus, there was little time for in-depth planning and activities were based mostly on what resources were available at the time. Program staff is already planning next year's courses to coordinate more closely with school curriculum and NM content standards. Moreover, the program intends to incorporate integrated thematic instructional techniques. This approach is based on the latest research in teaching and learning.

### Summer Youth College at a Glance

























































<b>Primary Agency</b>	Luna Vocational Technical Institute
<b>Budget</b>	\$90,000
<b>Contact</b>	Mary Romero 505-454-2563 mromero@lvti.cc.nm.us
<b>District(s) Served</b>	Espanola, Las Vegas City, Maxwell, Mora, Penasco, Santa Rosa, Springer, Wagon Mound, West Las Vegas
<b>Number of Students Served</b>	175
<b>Content Areas</b>	Language Arts, Math, Science, Spanish, Technology
<b>Timeframe</b>	Summer






## OVERALL RATING

<b>addresses important educational issue(s)</b>		The Summer Youth College exposes students to college at an early age. It introduces them to specific courses that are required for success in post-secondary education and helps them prepare for those courses. It encourages better educational planning for students and their families.
<b>aligned with NNMCEE mission and priorities (including purpose of Goal 2)</b>		Success in post-secondary education is directly related to success in the workforce, a priority of NNMCEE. The program can be expanded both in scope and participation.
<b>articulates its goals and design clearly</b>		The program is using goals, objectives, and performance indicators from a U.S. Department of Education Gear Up grant. This provides strong guidance. However, the program needs to adapt this design.
<b>develops complex learning and thinking skills</b>		A primary goal of the program is to encourage and support students in enrolling in college preparation courses. There is not data as of yet to support this. The actual curriculum of the Summer College must be strengthened and more closely aligned with those courses.
<b>target audience includes at-risk or underserved students</b>		The target audience <i>is</i> at-risk and underserved students.
<b>promotes coherent organizational change</b>		The project involves a number of agencies. There is certainly strong organizational support on the part of Luna Vocational Technical Institute, representing systemic change. However, school districts must become involved in supporting the program.
<b>rigorous, measurable evidence for outcomes</b>		There is a strong plan in place to measure student outcomes. Whether or not the program can follow-through with this evidence remains to be seen.
<b>adaptable for use in multiple contexts</b>		The structure of the Summer Youth College is flexible and adaptable to a wide variety of disciplines.

 poor  
  below average  
  average  
  above average  
  exemplary

## Summary

PROJECT	Rating Criteria							
	addresses important educational issue(s)	aligned with NNMCEE mission and priorities	articulates its goals and design clearly	develops complex learning and thinking skills	target audience includes at-risk or underserved students	promotes coherent organizational change	rigorous, measurable evidence for outcomes	adaptable for use in multiple contexts
Community Academy of Science and Math								
Drawing from the Well								
Family School Partnership								
Millennium Camp								
Service Learning								
Summer Environmental Science Program								
Summer Youth College								

 poor
  below average
  average
  above average
  exemplary

## What Next?

A number of recommendations were introduced in the Executive Summary. Central to improving the process and creating additional value to this research is the development and maintenance of a database that is

- interactive;
- dynamic;
- sustainable; and
- web-based.

### Interactive

An interactive database allows users to input information and, thus, become integral to the data collection process. It also allows users to extract data, making it useful to them. This reinforces the idea of shared responsibility and shared value.

### Dynamic

The database must be flexible both in the type of data it collects and its ability to update data. Ideally, the collection process would be ongoing.

### Sustainable

While the information itself is user-driven, the database will still require expert maintenance if it is to be sustainable in the long-term. Such maintenance could include linking users to resources, moderating on-line discussion groups, and providing other technical assistance to keep users engaged and create value. Technical assistance topics may include program design, management, evaluation, and sustainability.

### Web-Based

A web-based solution can accommodate the features discussed above. It is a widely accessible and cost-effective mechanism.

An example of this concept can be found at [csrdweb.net](http://csrdweb.net) – a website maintained by the U.S. Department of Education's network of Education Laboratories for the Comprehensive School Reform demonstration initiative.

